

14. (New) A method of demultiplexing a multiplex signal, said multiplex signal comprising one or more data units, including a video data unit, and a framing data block, the framing data block carrying information on the configuration of the data units in said multiplex signal, the method comprising:

searching for said framing data block from a received multiplex signal;

demultiplexing said one or more data units according to the information in said framing data block;

A
generating one or more demultiplexed signals, including a demultiplexed video data signal, from said demultiplexed data units;

wherein the method further comprises:

forwarding said demultiplexed video data signal to a video decoder for decoding;

detecting at demultiplexing a possible invalidity of a demultiplexed video data unit; and

forwarding, as a response to detecting an invalidity in a demultiplexed video data unit, an error type indication to the video decoder with the demultiplexed video data signal.

15. (New) A method according to claim 14, further comprising forwarding error location information relating to the demultiplexed video data signal to the video decoder, the error

location information indicating the location of erroneous bits in the demultiplexed video data signal.

16. (New) A method according to claim 15, wherein the error location information comprises a table of error locations.

17. (New) A method according to claim 15, wherein if it is not possible to determine the location of erroneous bits in the demultiplexed video data signal, a general error indication is forwarded to the video decoder.

18. (New) A method according to claim 14, further comprising adding the error type indication to the demultiplexed video data signal.

19. (New) A method according to claim 18, further comprising adding error location information to the demultiplexed video data signal, the error location information indicating the location of erroneous bits in the demultiplexed video data signal.

20. (New) A method according to claim 19, wherein the error location information comprises a table of error locations.

21. (New) A method according to claim 14, further comprising adding the error type indication to the demultiplexed video data unit.

22. (New) A method according to claim 21, comprising adding error location information to the demultiplexed video data unit, the error location information indicating the location of erroneous bits in the demultiplexed video data unit.

23. (New) A method according to claim 22, wherein the error location information comprises a table of error locations.

24. (New) A method according to claim 14, wherein said framing data blocks comprise an HDLC flag.

25. (New) A method according to claim 14, wherein said framing data blocks comprise a PN flag.

26. (New) A method according to claim 14, wherein the step of detecting a possible invalidity of a demultiplexed video data unit comprises checking for missing video data units.

Can't
A
27. (New) A method according to claim 26, wherein if the step of detecting a possible invalidity of a demultiplexed video data unit by checking for missing video data units reveals that a video data unit is missing, the demultiplexed video data unit is considered invalid and the error type indication forwarded to the video decoder as a response to detecting an invalidity in the demultiplexed video data unit is indicative of a missing video data unit.

28. (New) A method according to claim 14, wherein the step of detecting a possible invalidity of a demultiplexed video data unit comprises checking the validity of a sequence number associated with a demultiplexed video data unit.

29. (New) A method according to claim 28, wherein said demultiplexed video data unit is an AL-PDU.

30. (New) A method according to claim 28, wherein if the step of detecting a possible invalidity of a demultiplexed video data unit by checking the validity of a sequence number associated with said demultiplexed video data unit reveals that a video data unit is missing, the method further comprises substituting the missing video data unit in the demultiplexed video data signal with an empty video data unit.

31. (New) A method according to claim 28, wherein if the step of detecting a possible invalidity of a demultiplexed video data unit by checking the validity of a sequence number associated with said demultiplexed video data unit reveals that a video data unit is missing, the demultiplexed video data unit is considered invalid and the error type indication forwarded to the video decoder as a response to detecting an invalidity in the demultiplexed video data unit is indicative of a missing video data unit.

32. (New) A method according to claim 14, wherein the step of detecting a possible invalidity of a demultiplexed video data unit comprises checking for illegal bit combinations in a demultiplexed video data unit.

33. (New) A method according to claim 32, wherein if the step of detecting a possible invalidity of a demultiplexed video data unit by checking for illegal bit combinations in a demultiplexed video data unit reveals an illegal bit combination in a demultiplexed video data unit, the demultiplexed video data unit is considered invalid and the error type indication forwarded to the video decoder as a response to detecting an invalidity in the demultiplexed video data unit is indicative of an illegal bit combination.

34. (New) A method according to claim 14, wherein the step of detecting a possible invalidity of a demultiplexed video data unit comprises checking an assumed header portion of a demultiplexed video data unit for errors, wherein if the assumed header portion is found to contain an error a further check is performed to determine whether the length of the demultiplexed video data unit agrees with an expected length of the demultiplexed video data unit.

35. (New) A method according to claim 34, wherein if the expected length of the demultiplexed video data unit suggests that the demultiplexed video data unit should be longer than it is, the demultiplexed video data unit is considered invalid and the error type indication forwarded to the video decoder as a response to detecting an invalidity in the demultiplexed video data unit is indicative of a possibly short video data unit.

36. (New) A method according to claim 14, wherein the step of detecting a possible invalidity of a demultiplexed video data unit comprises checking the length of a demultiplexed video data unit.

37. (New) A method according to claim 36, wherein if the step of detecting a possible invalidity of a demultiplexed video data unit by checking the length of a demultiplexed video data unit reveals that a demultiplexed video data unit has a length exceeding a predetermined length, the demultiplexed video data unit is considered invalid and the error type indication forwarded to the video decoder as a response to detecting an invalidity in the demultiplexed video data unit is indicative of a concatenation of video data units.

38. (New) A method according to claim 36, wherein if the step of detecting a possible invalidity of a demultiplexed video data unit by checking the length of a demultiplexed video data unit reveals that a demultiplexed video data unit has been erroneously cut short, the demultiplexed video data unit is considered invalid and the error type indication forwarded to the video decoder as a response to detecting an invalidity in the demultiplexed video data unit is indicative of the demultiplexed video data unit having a length that is possibly too short.

39. (New) A method according to claim 14, wherein the step of detecting a possible invalidity of a demultiplexed video data unit comprises searching for a shifted location of the starting point of a demultiplexed video data unit.

40. (New) A method according to claim 39, wherein if the step of detecting a possible invalidity of a demultiplexed video data unit by searching for a shifted location of the starting point of a demultiplexed video data unit reveals that the starting point of a demultiplexed video data unit is shifted, the demultiplexed video data unit is considered invalid and the error type indication forwarded to the video decoder as a response to detecting an invalidity in the demultiplexed video data unit is indicative of the demultiplexed video data unit having a shifted starting point.

41. (New) A method according to claim 40, wherein the shifted location of the starting point of the demultiplexed video data unit is indicated to the video decoder.

42. (New) A device for demultiplexing a multiplex signal, said multiplex signal comprising one or more data units, including a video data unit, and a framing data block, the framing data block carrying information on the configuration of the data units in said multiplex signal, said device comprising:

means for searching for said framing data block in a received multiplex signal;

means for demultiplexing said one or more data units according to the information in said framing data block;

means for generating one or more demultiplexed signals, including a demultiplexed video data signal from said demultiplexed data units,

wherein said device further comprises:

means for forwarding said demultiplexed video data signal to a video decoder for decoding;

means for detecting at demultiplexing a possible invalidity of a demultiplexed video data unit; and

means for forwarding, as a response to detecting an invalidity in a demultiplexed video data unit, an error type indication to the video decoder with the demultiplexed video data signal.

43. (New) A device according to claim 42, further comprising means for forwarding error location information relating to the demultiplexed video data signal to the video decoder, the error

location information indicating the location of erroneous bits in the demultiplexed video data signal.

44. (New) A device according to claim 43, comprising means for forwarding a general error indication to the video decoder if it is not possible to determine the location of erroneous bits in the demultiplexed video data signal.

45. (New) A device according to claim 42, further comprising means for adding the error type indication to the demultiplexed video data signal.

46. (New) A device according to claim 45, comprising means for adding error location information to the demultiplexed video data signal, the error location information indicating the location of erroneous bits in the demultiplexed video data signal.

47. (New) A device according to claim 42, further comprising means for adding the error type indication to the demultiplexed video data unit.

48. (New) A device according to claim 47, comprising means for adding error location information to the demultiplexed video data unit, the error location information indicating the location of erroneous bits in the demultiplexed video data unit.

49. (New) A device according to claim 42, wherein said means for detecting a possible invalidity of a demultiplexed video data unit comprises means for checking for missing video data units.

50. (New) A device according to claim 49, wherein said means for forwarding an error type indication to the video decoder is arranged to forward an error type indication indicative of a missing video data unit to the video decoder if said means for detecting a possible invalidity of a demultiplexed video data unit detects that a video data unit is missing.

51. (New) A device according to claim 42, wherein said means for detecting a possible invalidity of a demultiplexed video data unit comprises means for checking the validity of a sequence number associated with a demultiplexed video data unit, wherein if said means for detecting a possible invalidity of a demultiplexed video data unit detects an invalidity in a sequence number associated with the demultiplexed video data unit, it is arranged to interpret such an invalidity as being indicative of a missing video data unit.

52. (New) A device according to claim 51, comprising means for substituting a missing video data unit in the demultiplexed video data signal with an empty video data unit.

53. (New) A device according to claim 51, wherein said means for forwarding an error type indication to the video decoder is arranged to forward an error type indication indicative of a missing video data unit to the video decoder if said means for detecting a possible invalidity of a demultiplexed video data unit detects an invalidity in a sequence number associated with a demultiplexed video data unit.

54. (New) A device according to claim 42, wherein said means for detecting a possible invalidity of a demultiplexed video

data unit comprises means for checking for illegal bit combinations in a demultiplexed video data unit.

55. (New) A device according to claim 54, wherein said means for forwarding an error type indication to the video decoder is arranged to forward an error type indication indicative of an illegal bit combination to the video decoder if said means for detecting a possible invalidity of a demultiplexed video data unit detects an illegal bit combination in a demultiplexed video data unit.

56. (New) A device according to claim 14, wherein said means for detecting a possible invalidity of a demultiplexed video data unit comprises means for checking an assumed header portion of a demultiplexed video data unit for errors, wherein if said means for detecting a possible invalidity of a demultiplexed video data unit detects an error in the assumed header portion, it is arranged to perform a further check to determine whether the length of the demultiplexed video data unit agrees with an expected length of the demultiplexed video data unit.

57. (New) A device according to claim 56, wherein said means for forwarding an error type indication to the video decoder is arranged to forward an error type indication indicative of a possibly short video data unit to the video decoder if said means for detecting a possible invalidity of a demultiplexed video data unit determines that the expected length of the demultiplexed data unit suggests that the demultiplexed video data unit should be longer than it is.

58. (New) A device according to claim 42, wherein said means for detecting a possible invalidity of a demultiplexed video

data unit comprises means for checking the length of a demultiplexed video data unit.

59. (New) A device according to claim 58, wherein said means for forwarding an error type indication to the video decoder is arranged to forward an error type indication indicative of a concatenation of video data units to the video decoder if said means for detecting a possible invalidity of a demultiplexed video data unit determines that a demultiplexed video data unit has a length exceeding a predetermined length.

60. (New) A device according to claim 58, wherein said means for forwarding an error type indication to the video decoder is arranged to forward an error type indication indicative of a demultiplexed video data unit having a length that is possibly too short to the video decoder if said means for detecting a possible invalidity of a demultiplexed video data unit determines that a demultiplexed video data unit has been erroneously cut short.

61. (New) A device according to claim 42, wherein said means for detecting a possible invalidity of a demultiplexed video data unit comprises means for searching for a shifted location of the starting point of a demultiplexed video data unit.

62. (New) A device according to claim 61, wherein said means for forwarding an error type indication to the video decoder is arranged to forward an error type indication indicative of a demultiplexed video data unit having a shifted starting point to the video decoder if said means for detecting a possible invalidity of a demultiplexed video data unit determines that

the starting point of a demultiplexed video data unit is shifted.

63. (New) A device according to claim 62, wherein said means for detecting a possible invalidity of a demultiplexed video data unit is arranged to indicate the shifted location of the starting point of the demultiplexed video data unit to the video decoder.

64. (New) A multimedia terminal comprising a demultiplexer for demultiplexing a multiplex signal, said multiplex signal comprising one or more data units, including a video data unit, and a framing data block, the framing data block carrying information on the configuration of the data units in said multiplex signal, said demultiplexer comprising:

GM1
A
a video decoder;

means for searching for said framing data block in a received multiplex signal;

means for demultiplexing said one or more data units according to the information in said framing data block;

means for generating one or more demultiplexed signals, including a demultiplexed video data signal from said demultiplexed data units,

wherein the demultiplexer of said multimedia terminal further comprises:

means for forwarding said demultiplexed video data signal to the video decoder for decoding;

means for detecting at demultiplexing a possible invalidity of a demultiplexed video data unit; and

means for forwarding, as a response to detecting an invalidity in a demultiplexed video data unit, an error type indication to the video decoder with the demultiplexed video data signal.

65. (New) A multimedia terminal according to claim 64, wherein the video decoder of the multimedia terminal is adapted to use the error type information to conceal errors in the demultiplexed video data signal.

66. (New) A multimedia terminal according to claim 64, comprising means for forwarding error location information relating to the demultiplexed video data signal to the video decoder, the error location information indicating the location of erroneous bits in the demultiplexed video data signal.

67. (New) A multimedia terminal according to claim 64, wherein the video decoder of the multimedia terminal is adapted to use the error location information to conceal errors in the demultiplexed video data signal.

68. (New) A multimedia terminal according to claim 64, comprising a wireless interface for communication with a wireless communications network.
